

## Salt Marsh Restoration

Ducks Unlimited Inc.

Atlantic Coast Ecosystem Initiative

Grace E. Bottitta



*The Dust Bowl Days.....*

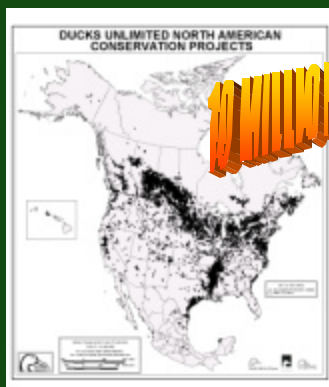


*.....Parched Prairies and Empty Skies*

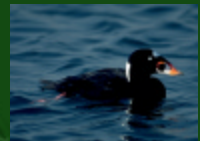


*Wetland Restorations on Canadian Prairies*

Ducks Unlimited conserves, restores, and manages wetlands and associated habitats for North America's waterfowl. These habitats also benefit other wildlife and people.



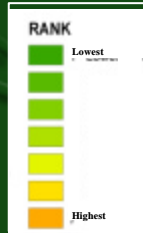
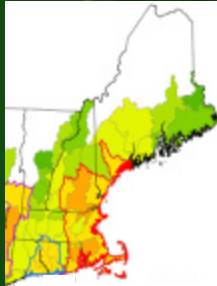
**10 MILLION ACRES!!!!**



**WHY?**



## Atlantic Coast Ecosystem Initiative New England Priority Areas



## Atlantic Coast Ecosystem Initiative

GOAL: Restore and protect ecological functions and values of coastal watersheds



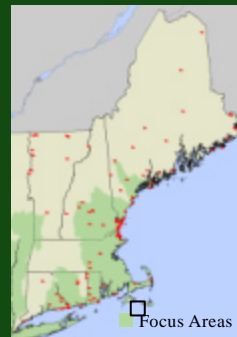
### BENEFITS:

- \* Critical habitat for wintering, nesting and migrating birds
- \* Important habitat to fish & shellfish
- \* Improves water quality
- \* Supports recreational opportunities

Restoring habitat for wildlife and people



## DU Projects in New England



> 100 projects completed  
> 10,000 acres conserved



## Pickering Brook salt marsh restoration



Portsmouth Country Club

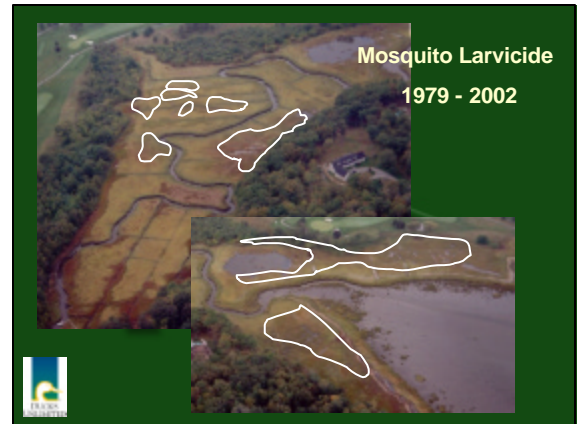


Jackson Estuarine Laboratory



Fuller Foundation





LONG-TERM GOAL

To restore the hydrology of Pickering Brook salt marsh.

OBJECTIVES

1. Raise the average water table of the marsh
2. Increase the diversity of open water habitat on the marsh surface
3. Decrease mosquito breeding on the salt marsh

Proposed Activities:

1. Plug selected man-made ditches
  - ↑ surface water
  - ↑ ground water levels

Proposed Activities:

2. Excavate deeper areas in selected pools prone to desiccation
  - ↓ fish holdover areas
  - ↓ wildlife habitat

Proposed Activities:

3. Connect pools and pannes by runnels
  - fish holdover areas
  - equalize water quality of pools



#### Proposed Activities:

4. Revert selected man-made ditches to functioning salt marsh  
- fill in selected man-made ditches



#### Proposed Activities:

5. Keep selected man-made ditches open  
- allows for fresh water runoff from upland  
- allows for some "natural" channel flow  
- fish and shellfish habitat



#### Projected outcome



#### Monitor conditions of marsh



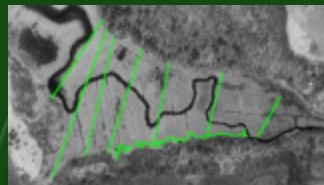
#### Fish usage



### Marsh hydrology



### Vegetation communities



### Bird usage



### Community Participation



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[www.ducks.org/conservation/Projects/  
GreatLakesAtlantic/AtlanticCoast](http://www.ducks.org/conservation/Projects/GreatLakesAtlantic/AtlanticCoast)

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